

U.S. Serial No. 09/601,790
Attorney Docket No. 46613-00011
Amendment under 37 C.F.R. §1.312

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (previously presented) A multilayer, biaxially oriented polypropylene film comprising a base layer and at least one heat-sealable top layer, wherein said base layer comprises (i) an isotactic propylene polymer and (ii) a combination of a hydrocarbon resin and a wax, said resin having a mean molecular weight MW of from 600 to 1500 and said wax having a mean molecular weight Mn of from 200 to 700.
2. (previously presented) A polypropylene film as claimed in claim 1, wherein a n-heptane-insoluble content of the propylene polymer of the base layer has a chain isotacticity index, measured by means of C-NMR spectroscopy, of at least 95%.
3. (previously presented) A polypropylene film as claimed in claim 1, wherein the propylene polymer has a Mw/Mn selected from the group consisting of 10 and less than 10.
4. (previously presented) A polypropylene film as claimed in claim 1, wherein the propylene polymer of the base layer has been peroxidically degraded or has been prepared by means of a metallocene catalyst.

U.S. Serial No. 09/601,790
Attorney Docket No. 46613-00011
Amendment under 37 C.F.R. §1.312

5. (previously presented) A polypropylene film as claimed in claim 1 wherein said resin is selected from the group consisting of an unhydrogenated styrene polymer, a methylstyrene-styrene copolymer, a pentadiene copolymer, a cyclopentadiene copolymer, an alpha-pinene polymer, a beta-pinene polymer, a colophony, colophony derivatives, terpene polymers, hydrogenated compounds of terpene polymers, a hydrogenated alpha-methylstyrene-vinyltoluene copolymer, and mixtures thereof.

6. (previously presented) A polypropylene film as claimed in claim 1, wherein the hydrocarbon resin is present in an amount of from 1 to 15% by weight, based on the weight of the base layer.

7. (previously presented) A polypropylene film as claimed in claim 1, wherein the wax is present in an amount of from 1 to 10% by weight, based on the weight of the base layer.

8. (previously presented) A polypropylene film as claimed in claim 1, wherein the wax is a polyethylene wax having an Mw/Mn selected from the group consisting of 2 and less than 2.

9. (previously presented) A polypropylene film as claimed in claim 1, wherein the wax is a macrocrystalline paraffin wax.

U.S. Serial No. 09/601,790
Attorney Docket No. 46813-00011
Amendment under 37 C.F.R. §1.312

10. (previously presented) A polypropylene film as claimed in claim 1, which has a heat-sealable top layer of alpha-olefinic polymers on both sides.

11. (previously presented) A polypropylene film as claimed in claim 10, wherein the polymer of the top layers has been peroxidically degraded and the degradation factor is in the range from 3 to 15.

12. (previously presented) A polypropylene film as claimed in claim 10, wherein an interlayer of alpha-olefinic polymers has been applied to one or both sides between the base layer and the top layers.

13. (previously presented) A polypropylene film as claimed in claim 1, wherein the total thickness of the film is from 4 to 60 um and the base layer makes up from about 40 to 60% of the total thickness.

14. (previously presented) A polypropylene film as claimed in claim 20, wherein the base layer comprises a tertiary aliphatic amine as an antistatic.

15. (previously presented) A polypropylene film as claimed in claim 21, wherein the top layer comprises polydimethylsiloxane as a lubricant and SiO₂ as an antiblocking agent.

U.S. Serial No. 09/601,790
Attorney Docket No. 46813-00011
Amendment under 37 C.F.R. §1.312

16. (previously presented) A polypropylene film as claimed in claim 1, wherein all layers of the film further comprise neutralizers and stabilizers.

17. (previously presented) A process for the production of a polypropylene film as claimed in claim 1, which comprises performing an orientation in the longitudinal direction with a longitudinal stretching ratio of from 5:1 to 9:1 and in the transverse direction with a transverse stretching ratio of from 5:1 to 10:1.

18. (cancelled)

19. (cancelled)

20. (previously presented) The polypropylene film as claimed in claim 1, wherein the base layer further comprises at least one additive selected from the group consisting of neutralizers, stabilizers, antistatics and lubricants.

21. (previously presented) The polypropylene film as claimed in claim 1, wherein the top layer further comprises at least one additive selected from the group consisting of neutralizers, stabilizers, antistatics, lubricants and anti-blocking agents.

22. (previously presented) The polypropylene film as claimed in claim 13, wherein the total thickness of the film is from 5 to 30 μm .

U.S. Serial No. 09/601,790
Attorney Docket No. 46813-00011
Amendment under 37 C.F.R. §1.312

23. (previously presented) The polypropylene film as claimed in claim 13, wherein the total thickness of the film is from 6 to 25 μm .

24. (previously presented) A process for the production of oriented polypropylene films having an improved water vapor barrier action, which comprises compressing an isotactic polymer or an isotactic polymer mixture, said polymer or polymer mixture containing a resin having a molecular weight M_w of from 600 to 1500 and a wax having a mean molecular weight M_n of from 200 to 700.

25. (previously presented) A packaging film produced by the process of claim 24.

26. (previously presented) The polypropylene film as claimed in claim 11, wherein the degradation factor is in the range from 6 to 10.

27. (previously presented) A polypropylene film as claimed in claim 6, wherein the hydrocarbon resin is present in an amount of from 5 to 12% by weight, based on the weight of the base layer.

28. (previously presented) A polypropylene film as claimed in claim 7, wherein the wax is present in an amount of from 1 to 8% by weight, based on the weight of the base layer.

U.S. Serial No. 09/601,790
Attorney Docket No. 46613-00011
Amendment under 37 C.F.R. §1.312

29. (previously presented) A polypropylene film as claimed in claim 7, wherein the wax is present in an amount of from 1 to 6% by weight, based on the weight of the base layer.

30. (previously presented) A multilayer, biaxially oriented polypropylene film comprising a base layer and at least one heat-sealable top layer, wherein said base layer comprises (i) an isotactic propylene polymer and (ii) a combination of a resin and a wax,

wherein said resin being a hydrocarbon resin, fully or partially hydrogenated,

having a softening point of 80 C or above and having a mean molecular weight Mw of from 600 to 1500; and

said wax being selected from the group consisting of polyethylene waxes, macrocrystalline paraffin waxes, microcrystalline paraffin's and mixtures thereof and having a mean molecular weight Mn of from 200 to 700.

31. (previously presented) A polypropylene film as claimed in claim 29, wherein said hydrocarbon resin is selected from the group consisting of petroleum resins, styrene resins, cyclopentadiene resins, terpene resins and mixtures thereof.

32. (previously presented) A polypropylene film as claimed in claim 29, wherein said wax is a microcrystalline paraffin having a melting point of from 60 C to 100 C.